

PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program

Implementation Grant, Round 1, FY 2010-2011

Applicant	Los Angeles County Flood Control District	Amount Requested	\$32,000,000
Proposal Title	Greater Los Angeles County IRWM Project Implementation	Total Proposal Cost	\$122,004,223

PROPOSAL SUMMARY

Thirteen projects are included in the proposal: (1) Hahmongna Basin Multi-Use Project, (2) Citywide Smart Irrigation Control System and Recycled Water Improvements, (3) Storm Drain Improvements and Installation of Infiltration Chambers on Hawthorne Boulevard, (4) Penmar Water Quality and Runoff Reuse Project, (5) Model Equestrian Center, (6) 16th St Watershed Runoff Use Project, (7) Covina Surface Water Treatment Plant Improvements, (8) Central LA County Regional Water Recycling Program, (9) Tujunga Spreading Grounds Enhancements, (10) San Antonio Spreading Grounds Improvements, (11) Leo J Vander Lans Advanced Water Treatment Plant Expansion, (12) Whittier Narrows Conservation Pool Project, and (13) Water and Energy Efficiency in the School and Hotel/Motel Sectors.

PROPOSAL SCORE

Criteria	Score/ Points Possible	Criteria	Score/ Points Possible
Work Plan	12/15	Economic Analysis – Water Supply Costs and Benefits	12/15
Budget	3/5	Water Quality and Other Expected Benefits	6/15
Schedule	5/5	Economic Analysis – Flood Damage Reduction	6/15
Monitoring, Assessment, and Performance Measures	4/5	Program Preferences	8/10
Total Score (max. possible = 85)			56

EVALUATION SUMMARY

The following is a review summary of the proposal.

Work Plan

The criterion is fully addressed, but is not entirely supported by thorough documentation or sufficient rationale. The Proposal includes: goals and objectives; a tabulated overview of projects which includes an abstract and project status; regional and detailed project location maps; a discussion of the synergies or linkages among the various projects, and other necessary work plan criteria elements. A strong relationship is shown to exist between the adopted IRWM Plan (Plan) and the Proposal; and the Proposal clearly will further implementation of the Plan. However, for Project 5, it was unclear how the bulk of the project

construction costs will contribute to improving water quality. Especially considering the applicant acknowledges that "the scale of the impact of equestrian activities on receiving waters is not known at this time..." (pg. 3-110). No reports or studies are provided to support the need for the project (i.e., studies documenting the existing water quality/water use issues at the facility).

Budget

The budgets for most of the projects in the proposal have detailed cost information, however, not all of the costs appear reasonable or supporting documentation is lacking. For example, while detailed costs by tasks are provided for some projects (and as appropriate, also provided in detailed cost tables), several cost estimates do not include sufficient detail and documentation of how the costs were derived (i.e., using previous similar project experience, engineer's estimate, bids or other). Examples include: 1) Hahamongna Basin Multi-Use Project: Task 4 through Task 7; 2) Penmar Water Quality and Runoff Reuse Project: Task 9.2 & 9.3; 3) Model Equestrian Center - Tasks 5, 6; & 7; 4) Central LA County Regional Water Recycling Program: Task 5 and 9.1; 5) Tujunga Spreading Grounds: Tasks 8, 9.1, 9.2 & 10; and 6) Surface Water Treatment Facility Project: Task 8 (Construction Contracting, Page 4-55) which includes a lump sum estimate of \$12,000 (labor cost) that is not detailed and has no supporting information. For this project, the Proposal references an attachment, the Capitol Cost Opinion (Attachment 3, File 4 of 5 beginning on Page 354) as the basis for Construction cost estimates, however, very little cost estimate information is found in the referenced document to support the cost estimates provided. For example, information could not be found in the referenced Capitol Cost Opinion provided in the attachment to support the cost estimates shown for Task 9.1, Task 9.2 (Tables 4.82 and 4.84) and Task 9.3 (for combined cost estimate of over \$3.5M, Page 4-57); and 7) Leo J. Vander Lans Advanced Water Treatment Plant: Task 5 and 6.

Schedule

The schedule is consistent and reasonable and demonstrates a readiness to begin construction or implementation of at least one project of the Proposal no later than six months (December 1, 2011) after the anticipated award date (June, 1, 2011). The applicant has presented a detailed and specific schedule for each project that adequately documents the Proposal; each schedule is consistent with work plan/budget and reasonable. Project 4 will start construction before the anticipated grant award date; several projects will start construction before December 31, 2011 and eight projects will start construction within a year of the anticipated grant award. Nearly all projects in the Proposal will be complete or implemented by the end of 2013, allowing the State and the local communities to begin realizing the benefits of this Proposal quickly. Furthermore, a full score is awarded as all information requested in Attachment 5 is provided (including schedules that show: Task start and end dates, project milestones, individual schedules in a horizontal bar or Gantt chart format, and schedules that illustrate dependencies or predecessors by showing links between tasks).

Monitoring, Assessment, and Performance Measures

The criterion is fully addressed, but is not supported by thorough documentation or sufficient rationale. The applicant provided a majority of the information as required by this criterion for most projects. Discrepancies are described as follows. The goals for Project 2 are described as including reducing runoff and pollutants as well as reducing water consumption. However, documentation provided on Table 6.2 focuses heavily on water usage measures/targets and not runoff or pollutants measures/targets. In addition, no performance measures are found to track the other part of the project, which includes expanding its reclaimed water usage to several parks in the region (page 3-9 and 6-9). For Project 4 the Output and Outcome Indicators and Measurement Tools and Methods appear to be all the same. Output

Indicators should explain what metric will be used to track progress, while, outcome indicators should identify indicators that mark the specific progress that the project is intended to achieve. For example, goals for Project 6 are provided on pg 6-22; however, for goals #3 and #4 there do not appear to be any indicators, tools/methods, or targets on how progress of these goals will be tracked. For Project 7, one project goal includes improving the water quality of urban runoff, stormwater, and wastewater (Table 6.7). While the performance measures provided appear to lack detail to track such claims, it also appears that improvements to water quality as a result of the project will be limited only to drinking water quality. Therefore, the project improvements should not affect the quality of either surface water or wastewater quality (as claimed). For Project 8, project performance measures focus on decreasing 450 acre-feet per year (AFY) of potable supplies but do not focus on the other half of the project that studies the feasibility of storing up to 2,700 AFY of recycled water for groundwater recharge. For Project 9, insufficient detail was provided for the desired outcome. Project 12 includes claims of improvement to potable water supply (ground water) without intending to directly measure that quality. Finally, Project 13 claims to improve the quality of urban runoff, stormwater, and wastewater. While it is reasonable to assume that these improvements will occur, there are no measures or targets listed that indicate whether the project would succeed or not.

Economic Analysis – Water Supply Costs and Benefits

High levels of benefits relative to costs might be realized through this proposal; however, the quality of the analysis is moderate and supporting documentation is partially substantiated. Monetized water supply benefits are claimed for every project except one. Total monetized water supply benefits are \$477.29 million (M). This is a typo correction to Table 7.1 where Project 6 benefits are shown twice, Project 7 and 8 benefits are in the wrong rows, and Project 9 benefits of \$78.771 M are not included. Most claimed benefits are provided by Project 7 (\$172.15 M); Project 9 (\$78.771 M), Project 1 (\$50.567 M), Project 11 (\$45.285 M) and Project 10 (\$36.938 M).

For Project 7, the without-project analysis assumes that the Stage II disinfection byproducts rule will force the Temple Water Treatment Plant to shut down forcing Metropolitan Water District (MWD) Tier 1 treated water purchases. The analysis does not show that untreated water purchases would then be reduced by the same amount. This correction would limit the benefits to the difference in the cost of treated and untreated water rather than the \$760 to \$1500 that is claimed. For this reason, benefits are limited to the difference between treated and untreated water.

Project 9 would increase the capacity of the spreading grounds from 8,000 to 16,000 AFY, reducing imported water by 8,000 AFY. It is not clear if upgrades at Big Tujunga dam or upgrades at the Shela-Arleta landfill might also be needed to obtain the benefits claimed. It is assumed that a reduction of 8,000 AFY is plausible based on the use of existing storage and conveyance infrastructure leading to the Tujunga Spreading Grounds. Water is conservatively valued at the Tier 1 untreated rate including 1 percent increases after 2020. However, the cost of pumping recharged water to the surface should probably be included to be comparable with Metropolitan water.

Project 1 benefits are based on 4,300 AFY of new supply. This is based on a capacity of 1,435 AF. “In an average rainfall year, the Arroyo Seco watershed is estimated to produce runoff that will fill the Hahmongna Basin three times.” In dry years, the basin might be filled fewer times. It was unclear in the proposal that wet years might not make up for dry years, providing assurance that an average annual benefit of 4,300 AFY will be realized. In addition, the proposal does not include costs of pumping water out

of the basin, which should be included. Water is conservatively valued at the Tier 1 untreated rate including 1 percent increases after 2020.

For Project 11, existing treatment capacity would be expanded to produce 4,000 AFY to replace imported water that is currently injected into the basin for seawater intrusion as part of the Alamito Barrier Project. On page 7-61, “Projected savings through recharge of untreated imported water. . .” The water in Table 7.K.1 is valued at the Tier 1 treated rate which increases from \$826 in 2014 to \$1280 in 2043. The imported water that would be replaced should be valued at the untreated rate or even the replenishment rate. Therefore, benefits should be less than what is claimed.

For Project 10, benefits are correctly based on the difference between the cost of water required for spreading and MWD Tier 1 treated rates. However, “it is assumed that 8,250 AF of MWD surplus water will be available each year throughout the project life.” Although the proposal documents that there is capacity to move the 8,250 AFY if available, the proposal lacks supporting documentation that 8,250 AF will be available. Furthermore, the costs of groundwater pumping, being a cost of the water that was spread, are not included. Available water supply and benefits are probably about half of the amount claimed.

Economic Analysis – Water Quality and Other Expected Benefits

Only average levels of benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Monetized water quality and other benefits of \$3.981 M are claimed for four projects. Most claimed benefits are provided by Project 2 (\$1.215 M) and Project 12 (\$1.713 M). This proposal has a substantial amount of water quality benefits that are not counted in monetary terms.

Economic Analysis – Flood Damage Reduction

Only average levels of benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Monetized flood damage reduction benefits are not claimed. Qualitative benefits are claimed for projects 1, 3, 4, 9, and 12.

Program Preferences

The Proposal includes thirteen projects that collectively will implement nine Program Preferences including: Regional projects or programs, Effectively integrate water management programs and projects, Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program, Drought preparedness, Use and reuse water more efficiently, Expand environmental stewardship, Practice integrated flood management, Protect surface water and groundwater quality, and Ensure equitable distribution of benefits. The applicant adequately documents the magnitude and breadth of these program preferences and demonstrates with a high degree of certainty that if implemented, the Proposal will meet these preferences. However, the proposal does not meet the program preference for a disadvantaged community.